

# STATE OF COLORADO

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Dedicated to protecting and improving the health and environment of the people of Colorado

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Colorado Department  
of Public Health  
and Environment

**Certified Mail # 7012 1010 0003 4308 1764**  
**Return Receipt Requested**

July 29, 2014

Denver City Council  
City and County Building  
1437 Bannock Street, Room 451  
Denver, CO 80202

**Re:** Recommendation for Approval With Conditions  
Certificate of Designation Application  
Denver Zoo Waste-To-Energy System  
Denver, Colorado

**File:** sw/dvr/zoo/1.1

Dear Honorable City Council:

The Colorado Department of Public Health and Environment, Hazardous Materials and Waste Management Division (the "Division") received a referral correspondence from the Denver Department of Environmental Health on February 13, 2014. The correspondence included a letter requesting a review of the subject Certificate of Designation (CD) application, and a document titled "Engineering Design and Operations Plan (EDOP) Denver Zoological Foundation Waste To Energy System" (the "Plan"), prepared by the Denver Zoological Foundation (Denver Zoo) dated February 6, 2014.

The Division conducted a Completeness Review of the Plan in accordance with procedures outlined in State statute, CRS § 30-20-103 et seq., and corresponding Regulations Pertaining to Solid Waste Sites and Facilities, 6 CCR 1007-2, Part 1 (Solid Waste Regulations). In a letter dated March 6, 2014, the Division notified the Denver Zoo that the Plan was **Complete**.

The Division then conducted a comprehensive technical review of the Plan pursuant to the procedures outlined in State statute and the Solid Waste Regulations. On May 14, 2014, the Division sent Denver Zoo a request for additional information via email. The email consisted of highlighted portions of the Solid Waste Regulations that were omitted from the submitted Plan, but require Division approval. Denver Zoo responded in letter dated July 1, 2014, requesting

that those portions of the Solid Waste Regulations highlighted in the May 14, 2014 email be waived, consistent with the procedures of Section 1.5 of the Solid Waste Regulations. Based on review of the waiver request, the Division will waive the following sections of the Solid Waste Regulations:

- Section 11.2.3 (E) – Last three phrases shall be waived, which include the terms: “*energy recovery, air emissions control, and process monitoring system*”. The remainder of this regulation shall apply;
- Section 11.2.3 (H) – The last term “*energy*” shall be waived, and the remainder of this regulation shall apply;
- Section 11.2.3 (I)(2);
- Section 11.2.3 (I)(4) through Section 11.2.3 (I)(6).

In a letter dated June 6, 2014, the Division sent Denver Zoo specific technical comments based on information contained in the Plan. An adequate response to these comments was received from Denver Zoo in a letter dated July 3, 2014.

The Division initiated a 30-day written public comment period by publishing a public notice in the *Denver Post* newspaper on May 8, 2014. The Division did not receive any written comments during this period, which concluded on June 6, 2014.

As discussed above, the Division has completed review of the subject Plan for technical merit. It is the determination of the Division that Denver Zoo’s proposed waste-to-energy system can comply with technical, environmental, and public health standards of the Solid Waste Regulations if the waste-to-energy system is constructed, monitored, and operated as detailed in the Plan, and with the Conditions of the Division as stated in this letter. Based on this determination, the Division recommends that the waste-to-energy system be **approved** by the City and County of Denver, with the Conditions set forth herein, along with any additional local restrictions the City and County of Denver may chose to impose. The Division’s approval of the Plan has the following conditions that shall be incorporated into the CD, when and if issued by the City and County of Denver:

1. The Financial Assurance Plan, including independent third party or referenced cost estimate, shall be submitted to the Division for review and approval. In addition, the financial assurance mechanism must be in-place and approved by the Division prior to acceptance of solid waste material at the site. Please note that pursuant to the requirements of Section 1.8.3 of the Solid Waste Regulations, the post-closure cost estimate must be adjusted annually to account for inflation or deflation by using the implicit price deflator for the gross domestic product. Additionally, Denver Zoo must replace the original cost estimate every five (5) years unless otherwise required by the Division. Both the annual adjustment and the 5-year update cost estimates must be submitted to the Division for review and approval.
2. As discussed above, the July 3, 2014 responses by Denver Zoo to the Division’s June 6, 2014 comment letter are acceptable, and should be incorporated into the Plan. In addition, Denver Department of Environmental Health sent Denver Zoo comments in a

letter dated June 17, with a response by Denver Zoo in a letter dated July 16, 2014. Any changes to the Plan resulting from Denver Department of Environmental Health's comments must also be captured in an amended Plan. Therefore, Denver Zoo shall provide the Division with a complete, updated electronic version of the revised Plan. An additional hard copy set of the waste-to-energy system Plan is not required to be submitted to the Division.

As required by § 30-20-104(3)(a) and (3)(b), the City and County of Denver is obligated to notify its citizens and conduct a public hearing regarding the proposed waste-to-energy system. Please forward a copy of the City and County of Denver's final resolution concerning the CD issuance or denial to the Division.

In closing, the Division is authorized to bill for its review of technical submittals at \$125 per hour, pursuant to Section 1.7 of the Colorado Solid Waste Regulations, 6 CCR 1007-2. An invoice for the Division's technical review of the above referenced document will be sent to Denver Zoo under separate cover.

Should you have any questions regarding this letter, please contact Larry Bruskin at 303-692-3384 ([larry.bruskin@state.co.us](mailto:larry.bruskin@state.co.us)) or Curt Stovall at 303-692-2295 ([curtis.stovall@state.co.us](mailto:curtis.stovall@state.co.us)).

Sincerely,



Lawrence J. Bruskin, P.E.  
Solid Waste Permitting Unit  
Solid Waste and Materials  
Management Program  
Hazardous Materials and Waste  
Management Division



Curt Stovall, Permitting Unit Leader  
Solid Waste Permitting Unit  
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cc: George Pond, DZF  
Jennifer Hale, DZF  
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Diane DeLillio, Denver Environmental Health

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